**WEAR CONTAMINATION FLUID CONDITION** 

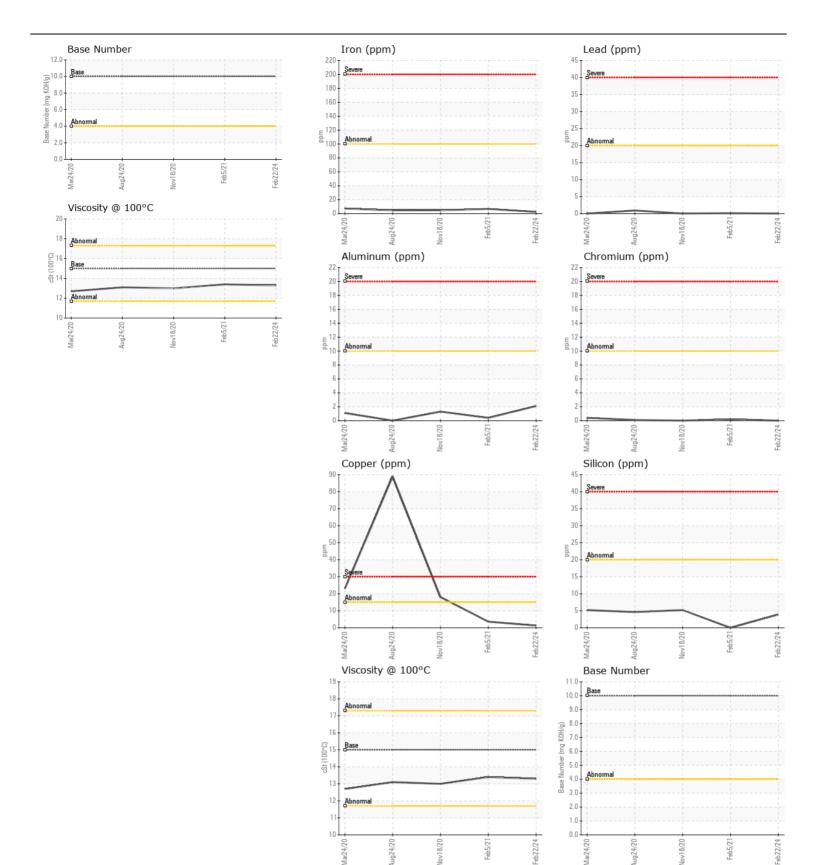
**NORMAL NORMAL** NORMAL

## [SWO-069917 APAC AL]

**VOLVO L150H 5908** 

Component Diesel Engine

VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 ( GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
TESSIMIENS/TISIC	Sample Number		Client Info		VCP444473	VCP297126	VCP292214
Resample at the next service interval to monitor.	Sample Date		Client Info		22 Feb 2024	05 Feb 2021	18 Nov 2020
	Machine Age	hrs	Client Info		7119	4099	3253
	Oil Age	hrs	Client Info		0	0	0
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	2	7	5
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>10	0	<1	0
	Nickel	ppm	ASTM D5185m		0	<1	0
	Titanium	ppm	ASTM D5185m		0	<1	<1
	Silver	ppm	ASTM D5185m	>2	0	<1	0
	Aluminum	ppm	ASTM D5185m		2	<1	1
	Lead	ppm	ASTM D5185m		0	<1	0
	Copper	ppm	ASTM D5185m		1	4	18
	Tin	ppm	ASTM D5185m		0	<1	0
	Vanadium	ppm	ASTM D5185m		0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	4	0	5
	Potassium	ppm	ASTM D5185m	>20	0	1	2
There is no indication of any contamination in the oil.	Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
	Water		WC Method	>0.1	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.2	0.1	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	8.3	7.3	8.1
	Sulfation	Abs/.1mm	*ASTM D7415	>30	18.8	21.6	20
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		1	2	3
	Boron	ppm	ASTM D5185m	2.5	104	60	53
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m	0.0	0	0	0
	Molybdenum	ppm	ASTM D5185m	0.7	84	25	5
	Manganese	ppm	ASTM D5185m	0.0	0	<1	<1
	Magnesium	ppm	ASTM D5185m	256	96	553	782
	Calcium	ppm	ASTM D5185m	2057	1946	1596	1419
	Phosphorus	ppm	ASTM D5185m	935	1022	871	745
	Zinc	ppm		1223	1180	972	818
	Sulfur	ppm	ASTM D5185m		3726	2636	2392
	Oxidation	Abs/.1mm	*ASTM D7414		13.3	17.4	13
	Base Number (BN)	mg KOH/g			6.4		
	Visc @ 100°C	cSt	ASTM D445	15.0	13.3	13.4	13.0







Certificate L2367

Laboratory Sample No.

Lab Number : 06101283 Unique Number : 10899513

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : VCP444473

Received **Tested** Diagnosed Test Package : MOB 1 ( Additional Tests: TBN )

: 27 Feb 2024 : 28 Feb 2024

: 28 Feb 2024 - Jonathan Hester

2238 PINSON VALLEY PARKWAY BIRMINGHAM, AL US 35217

**COWIN EQUIPMENT COMPANY** 

Contact: BRANTLY CLAY bclay@cowin.com

To discuss this sample report, contact Customer Service at 1-800-237-1369. \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: (205)856-2106

T: